

Date: Tue, 19 Jul 94 22:09:18 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
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Precedence: Bulk
Subject: Info-Hams Digest V94 #815
To: Info-Hams

Info-Hams Digest Tue, 19 Jul 94 Volume 94 : Issue 815

Today's Topics:

 Daily Summary of Solar Geophysical Activity for 13 July
 Daily Summary of Solar Geophysical Activity for 14 July
 Daily Summary of Solar Geophysical Activity for 15 July
 Daily Summary of Solar Geophysical Activity for 17 July

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
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Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 14 Jul 1994 01:12:32 MDT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 13 July
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

13 JULY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 13 JULY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 194, 07/13/94
 10.7 FLUX=081.4 90-AVG=080 SSN=081 BKI=0010 0111 BAI=001
 BGND-XRAY=A6.1 FLU1=*.E+** FLU10=*.E+** PKI=2010 1122 PAI=004
 BOU-DEV=004,004,006,002,004,006,008,009 DEV-AVG=005 NT SWF=00:000
 XRAY-MAX= B4.4 @ 1719UT XRAY-MIN= A5.5 @ 1238UT XRAY-AVG= A8.9
 NEUTN-MAX= +003% @ 0715UT NEUTN-MIN= -002% @ 1905UT NEUTN-AVG= +0.4%
 PCA-MAX= +0.3DB @ 2055UT PCA-MIN= -0.1DB @ 1455UT PCA-AVG= +0.1DB
 BOUTF-MAX=55250NT @ 1507UT BOUTF-MIN=55222NT @ 1938UT BOUTF-AVG=55241NT
 GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+097,+000,+000
 GOES6-MAX=P:+149NT@ 1827UT GOES6-MIN=N:-036NT@ 0035UT G6-AVG=+126,+033,-013
 FLUXFCST=STD:080,080,080;SESC:080,080,080 BAI/PAI-FCST=010,015,015/012,020,025
 KFCST=3323 2332 3344 3433 27DAY-AP=006,009 27DAY-KP=3121 2212 1223 3332
 WARNINGS=*SWF
 ALERTS=
 !!END-DATA!!

NOTE: The Effective Sunspot Number for 12 JUL 94 was 40.1.
 The Full Kp Indices for 12 JUL 94 are: 1+ 1- 0o 0o 1- 2- 1o 2-
 The 3-Hr Ap Indices for 12 JUL 94 are: 5 3 0 1 3 7 4 7
 Greater than 2 MeV Electron Fluence value is not available.

SPECIAL NOTICE REGARDING JUPITER AND PERIODIC COMET SHOEMAKER-LEVY 9

JUPITER - PERIODIC COMET SHOEMAKER-LEVY 9 (1993E)
 R. M. WEST, EUROPEAN SOUTHERN OBSERVATORY, HAS MEASURED THE
 NUCLEI ON CCD IMAGES OBTAINED DURING JULY 1-8 BY O. HAINAUT,
 R. SCHULZ, M. CAROLLO, C. ALARD AND A. CIMATTI WITH THE
 3.5-M NEW TECHNOLOGY TELESCOPE AND 1.5-M DANISH TELESCOPE.
 REDUCTIONS WERE WITH THE HELP OF SOUTHERN SKY ATLAS PLATES
 AND PROVISIONAL HIPPARCOS REFERENCE-STAR POSITIONS PROVIDED
 BY M. PERRYMAN AND C. TURON. F. NAKANO, SUMOTO, JAPAN, HAS
 COMPUTED IMPROVED ORBITS AND THE FOLLOWING TIMES (CORRECTED
 FOR LIGHT TIME) FOR THE IMPACTS ON JUPITER: A = 21,
 JULY 16.826 UT; B = 20, 17.113; C = 19, 17.287;
 D = 18, 17.483; E = 17, 17.625; F = 16, 18.014;
 G = 15, 18.308; H = 14, 18.805; K = 12, 19.425;
 L = 11, 19.919; N = 9, 20.428; P = 8 (= P2 = 8B), 20.624;
 Q = 7 (= Q1 = 7A), 20.831; R = 6, 21.223; S = 5, 21.627;
 T = 4, 21.758; U = 3, 21.907; V = 2, 22.166; W = 1, 22.330.
 COMPARISON WITH COMPUTATIONS BY P. W. CHODAS AND D. K. YEOMANS,
 JET PROPULSION LABORATORY, SUGGESTS THAT THE UNCERTAINTY IS
 NOW AROUND +/- 0.005 DAY FOR ALMOST ALL THESE NUCLEI, THE
 REMAINING UNCERTAINTY BEING MAINLY BECAUSE MOST OF THE
 EARLIER OBSERVATIONS WERE REDUCED USING THE STSCI GUIDE
 STAR CATALOGUE. USING THE TIDAL-DISRUPTION MODEL OF

Z. SEKANINA, CHODAS AND YEOMANS PROVIDE LESS CERTAIN IMPACT
TIMES FOR LOST AND LESS WELL OBSERVED FRAGMENTS: J = 13,
JULY 19.11 UT; M = 10, 20.24; P1 = 8A, 20.69; Q2 = 7B, 20.81.
THEY ADD THAT A SIGNIFICANT NUMBER OF PARTICLES BEYOND THE
EASTERN END OF THE NUCLEAR TRAIN SHOULD NOW ALREADY HAVE
BEGUN TO STRIKE JUPITER.
1994 JULY 9 (6017) BRIAN G. MARSDEN
CENTRAL BUREAU FOR ASTRONOMICAL TELEGRAMS
INTERNATIONAL ASTRONOMICAL UNION
POSTAL ADDRESS: CENTRAL BUREAU FOR ASTRONOMICAL TELEGRAMS
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TELEPHONE 617-495-7244/7440/7444 (FOR EMERGENCY USE ONLY)
TWX 710-320-6842 ASTROGRAM CAM EASYLINK 62794505
MARSDEN@CFA OR GREEN@CFA (.SPAN, .BITNET OR .HARVARD.EDU)

SYNOPSIS OF ACTIVITY

Solar activity was at very low levels.

Solar activity forecast: solar activity is expected to be
at very low to low levels.

The geomagnetic field has been at quiet levels for the
past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be at quiet to unsettled levels.

Event probabilities 14 jul-16 jul

Class M	05/05/05
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 14 jul-16 jul

A. Middle Latitudes

Active	20/30/30
Minor Storm	10/15/15
Major-Severe Storm	05/05/05

B. High Latitudes

Active	20/30/30
Minor Storm	10/15/15
Major-Severe Storm	05/05/05

HF propagation conditions were normal over all regions.
Near-normal propagation is expected to continue over the next
24 hours. High-latitude minor signal degradation may begin to
be observed on 15 July in response to a recurrent disturbance.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 13/2400Z JULY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7746	N12W71	157	0090	CA0	05	006	BETA	
7747	S16W65	151	0020	AXX	01	001	ALPHA	
7749	S08W83	169	0020	AXX	01	001	ALPHA	
7750	S16W83	169	0040	BX0	07	003	BETA	
7751	S12E15	071	0020	CRO	05	007	BETA	
7753	S12E39	047	0020	CRO	04	003	BETA	

REGIONS DUE TO RETURN 14 JULY TO 16 JULY

NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 13 JULY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
1647	1722	1732	7746	N12W69	B4.4	SF	220		

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 13 JULY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
13/A0027		B1241	S11E37	DSF				
13/ 2146	2157	2230	S12E18	LDE	B3.0	44		

INFERRED CORONAL HOLES. LOCATIONS VALID AT 13/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS									
	EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
92	N00E06	S04E01	N20W26	N24W01	097	ISO	POS	012	10830A
93	N63E56	N38W02	N38W02	N70E46	061	EXT	POS	026	10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
12 Jul:	0547	0555	0604	B2.4						
	0911	0919	0926	C6.0	SF	7746	N12W52			
	1040	1058	1103	B1.8						
	1246	1250	1253	B1.7						
	1336	1340	1344	B1.1						
	1527	1530	1534	B1.0						
	2245	2250	2303		SF	7746	N12W61			

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7746:	1	0	0	2	0	0	0	0	002	(28.6)
Uncorrelated:	0	0	0	0	0	0	0	0	005	(71.4)

Total Events: 007 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
12 Jul:	0911	0919	0926	C6.0	SF	7746	N12W52	II,III,V

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Thu, 14 Jul 1994 23:25:58 MDT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 14 July
To: info-hams@ucsd.edu

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

14 JULY, 1994

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 14 JULY, 1994

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!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 195, 07/14/94
10.7 FLUX=081.9  90-AVG=080          SSN=090          BKI=2234 4434  BAI=019
BGND-XRAY=A6.8    FLU1=1.5E+06  FLU10=3.9E+04  PKI=1124 5545  PAI=024
  BOU-DEV=013,011,021,046,061,063,039,067  DEV-AVG=040 NT      SWF=00:000
  XRAY-MAX= C2.3   @ 2000UT      XRAY-MIN= A6.0   @ 0239UT      XRAY-AVG= B1.0
NEUTN-MAX= +001%  @ 1200UT      NEUTN-MIN= -003%  @ 2010UT      NEUTN-AVG= -0.5%
  PCA-MAX= +0.1DB @ 2020UT      PCA-MIN= -0.4DB @ 1635UT      PCA-AVG= +0.0DB
BOUTF-MAX=55260NT @ 2342UT      BOUTF-MIN=55212NT @ 1820UT      BOUTF-AVG=55238NT
GOES7-MAX=P:+000NT@ 0000UT      GOES7-MIN=N:+000NT@ 0000UT      G7-AVG=+080,+000,+000
GOES6-MAX=P:+170NT@ 2008UT      GOES6-MIN=N:-076NT@ 1203UT      G6-AVG=+107,+034,-025
  FLUXFCST=STD:080,080,080;SESC:080,080,080  BAI/PAI-FCST=015,015,010/025,025,015
    KFCST=3345 4443 3345 4443  27DAY-AP=009,015  27DAY-KP=1223 3332 3443 2322
  WARNINGS=*SWF
    ALERTS=
!!END-DATA!!

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NOTE: The Effective Sunspot Number for 13 JUL 94 was 42.0.
The Full Kp Indices for 13 JUL 94 are: 2- 0+ 1- 0+ 1- 1+ 2- 2-
The 3-Hr Ap Indices for 13 JUL 94 are: 7 2 3 2 3 5 6 6
Greater than 2 MeV Electron Fluence for 14 JUL is: 3.5E+06

SPECIAL NOTICE REGARDING JUPITER AND PERIODIC COMET SHOEMAKER-LEVY 9

JUPITER - PERIODIC COMET SHOEMAKER-LEVY 9 (1993E)

R. M. WEST, EUROPEAN SOUTHERN OBSERVATORY, HAS MEASURED THE NUCLEI ON CCD IMAGES OBTAINED DURING JULY 1-8 BY O. HAINAUT, R. SCHULZ, M. CAROLLO, C. ALARD AND A. CIMATTI WITH THE 3.5-M NEW TECHNOLOGY TELESCOPE AND 1.5-M DANISH TELESCOPE. REDUCTIONS WERE WITH THE HELP OF SOUTHERN SKY ATLAS PLATES AND PROVISIONAL HIPPARCOS REFERENCE-STAR POSITIONS PROVIDED BY M. PERRYMAN AND C. TURON. F. NAKANO, SUMOTO, JAPAN, HAS COMPUTED IMPROVED ORBITS AND THE FOLLOWING TIMES (CORRECTED FOR LIGHT TIME) FOR THE IMPACTS ON JUPITER: A = 21, JULY 16.826 UT; B = 20, 17.113; C = 19, 17.287; D = 18, 17.483; E = 17, 17.625; F = 16, 18.014; G = 15, 18.308; H = 14, 18.805; K = 12, 19.425; L = 11, 19.919; N = 9, 20.428; P = 8 (= P2 = 8B), 20.624; Q = 7 (= Q1 = 7A), 20.831; R = 6, 21.223; S = 5, 21.627; T = 4, 21.758; U = 3, 21.907; V = 2, 22.166; W = 1, 22.330. COMPARISON WITH COMPUTATIONS BY P. W. CHODAS AND D. K. YEOMANS, JET PROPULSION LABORATORY, SUGGESTS THAT THE UNCERTAINTY IS NOW AROUND +/- 0.005 DAY FOR ALMOST ALL THESE NUCLEI, THE REMAINING UNCERTAINTY BEING MAINLY BECAUSE MOST OF THE EARLIER OBSERVATIONS WERE REDUCED USING THE STSCI GUIDE STAR CATALOGUE. USING THE TIDAL-DISRUPTION MODEL OF Z. SEKANINA, CHODAS AND YEOMANS PROVIDE LESS CERTAIN IMPACT TIMES FOR LOST AND LESS WELL OBSERVED FRAGMENTS: J = 13, JULY 19.11 UT; M = 10, 20.24; P1 = 8A, 20.69; Q2 = 7B, 20.81. THEY ADD THAT A SIGNIFICANT NUMBER OF PARTICLES BEYOND THE EASTERN END OF THE NUCLEAR TRAIN SHOULD NOW ALREADY HAVE BEGUN TO STRIKE JUPITER.

1994 JULY 9 (6017) BRIAN G. MARSDEN
CENTRAL BUREAU FOR ASTRONOMICAL TELEGRAMS
INTERNATIONAL ASTRONOMICAL UNION
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MARSDEN@CFA OR GREEN@CFA (.SPAN, .BITNET OR .HARVARD.EDU)

SYNOPSIS OF ACTIVITY

Solar activity was at low levels.

Solar activity forecast: solar activity is expected to be

at generally very low levels, with an occasional C flare.

The geomagnetic field has been at quiet to active levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be unsettled, with periods of active levels at low to mid latitudes. Mostly active levels with periods of minor storms are expected at high latitudes.

Event probabilities 15 jul-17 jul

Class M	05/05/05
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 15 jul-17 jul

A. Middle Latitudes

Active	60/60/30
Minor Storm	20/20/15
Major-Severe Storm	05/05/05

B. High Latitudes

Active	65/60/30
Minor Storm	25/25/15
Major-Severe Storm	05/05/05

HF propagation conditions were near-normal over all regions. High latitude sites began to report increased signal instability as the day progressed, coinciding with periods of enhanced geomagnetic activity and high-latitude substorming. Similar near-normal conditions are expected for the low and middle latitudes. High latitudes should see below-normal conditions with periods of poor propagation, particularly on transauroral night-sector circuits.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 14/2400Z JULY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7746	N11W83	156	0040	HSX	01	001	ALPHA	
7747	S14W69	142	0020	BX0	03	003	BETA	
7749	S08W94	167	0010	AXX	01	001	ALPHA	

7751 S14W00 073 0010 BX0 03 003 BETA
 7753 S12E26 047 0020 CR0 04 006 BETA
 7754 N11W07 080 0010 BX0 03 003 BETA
 7755 N07W42 115 0010 BX0 03 003 BETA
 REGIONS DUE TO RETURN 15 JULY TO 17 JULY
 NMBR LAT LO
 NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 14 JULY, 1994

 BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
 1707 1708 1709 100

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 14 JULY, 1994

 BEGIN MAX END LOCATION TYPE SIZE DUR II IV
 NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 14/2400Z

 ISOLATED HOLES AND POLAR EXTENSIONS
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
 92 N02E34 S08W03 N12W41 N25W11 089 ISO POS 014 10830A
 93 N54E59 N40E09 N50W21 N60E49 054 EXT POS 018 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

 Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

 13 Jul: 0016 0021 0024 B1.2 SF 7753 S12E50
 0050 0101 0107 B2.1
 0202 0205 0207 B1.2 SF 7747 S13W49
 0731 0735 0737 B1.1
 1138 1144 1150 B3.2 SF 7746 N10W66
 1555 1603 1608 B2.3
 1647 1722 1732 B4.4 SF 7746 N12W69
 2042 2050 2054 B1.7 SF 7749 S10W82
 2146 2157 2230 B3.0 SF 7751 S12E18

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
	--	--	--	--	--	--	--	--	---	-----
Region 7746:	0	0	0	2	0	0	0	0	002	(22.2)
Region 7747:	0	0	0	1	0	0	0	0	001	(11.1)
Region 7749:	0	0	0	1	0	0	0	0	001	(11.1)
Region 7751:	0	0	0	1	0	0	0	0	001	(11.1)
Region 7753:	0	0	0	1	0	0	0	0	001	(11.1)
Uncorrelated:	0	0	0	0	0	0	0	0	003	(33.3)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
-----	-----	-----	-----	-----	--	-----	-----	-----
13 Jul:	0016	0021	0024	B1.2	SF	7753	S12E50	III
	0050	0101	0107	B2.1				V
	1138	1144	1150	B3.2	SF	7746	N10W66	V
	1555	1603	1608	B2.3				III,V
	1647	1722	1732	B4.4	SF	7746	N12W69	V

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Fri, 15 Jul 1994 21:18:44 MDT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 15 July
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

15 JULY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 15 JULY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 196, 07/15/94
10.7 FLUX=083 90-AVG=080 SSN=059 BKI=4332 2224 BAI=014
BGND-XRAY=B1.2 FLU1=9.5E+05 FLU10=1.4E+04 PKI=4332 3334 PAI=017
BOU-DEV=045,021,021,***,017,018,017,050 DEV-AVG=027 NT SWF=00:000
XRAY-MAX= C1.1 @ 0733UT XRAY-MIN= A8.5 @ 0137UT XRAY-AVG= B2.0
NEUTN-MAX= +000% @ 2220UT NEUTN-MIN= -004% @ 0920UT NEUTN-AVG= -1.4%
PCA-MAX= +0.5DB @ 1625UT PCA-MIN= -0.8DB @ 1925UT PCA-AVG= -0.0DB
BOUTF-MAX=55267NT @ 0151UT BOUTF-MIN=55228NT @ 1749UT BOUTF-AVG=55244NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+079,+000,+000
GOES6-MAX=P:+157NT@ 2035UT GOES6-MIN=N:-066NT@ 0018UT G6-AVG=+107,+039,-023
FLUXFCST=STD:080,080,080;SESC:080,080,080 BAI/PAI-FCST=015,015,010/015,015,010
KFCST=3333 3333 3333 3333 27DAY-AP=015,024 27DAY-KP=3443 2322 2246 5333
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 14 JUL 94 was 45.0.
The Full Kp Indices for 14 JUL 94 are: 1+ 1+ 2+ 4+ 5- 5- 4- 5o
The 3-Hr Ap Indices for 14 JUL 94 are: 5 5 10 34 42 40 22 45
Greater than 2 MeV Electron Fluence for 15 JUL is: 2.0E+07

SYNOPSIS OF ACTIVITY

Solar activity was at low levels. Region 7756 (S12E59) was assigned.

Solar activity forecast: solar activity is expected to be generally at very low levels, with occasional C-class flares.

The geomagnetic field has been at quiet to active levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be at unsettled levels, with possible local nighttime sub-storming.

Event probabilities 16 jul-18 jul

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 16 jul-18 jul

A. Middle Latitudes

Active	30/25/25
Minor Storm	10/10/10
Major-Severe Storm	05/10/05

B. High Latitudes

Active	30/25/25
Minor Storm	15/10/10
Major-Severe Storm	05/05/05

HF propagation conditions were near-normal over all regions. A few brief periods of minor signal degradation may have been observed by a few high-latitude stations (on transauroral paths). Otherwise, near-normal conditions prevailed. Similar conditions are expected over the next 3 days, through 18 July. Conditions should begin gradually stabilizing on 18 July for transauroral paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 15/2400Z JULY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7751	S12W13	073	0010	BX0	04	003	BETA	
7753	S13E13	047	0030	CRO	06	005	BETA	
7754	N11W20	080	0020	BX0	03	007	BETA	
7756	S12E59	001	0060	CRO	04	004	BETA	

7755 N07W55 115 PLAGE
 REGIONS DUE TO RETURN 16 JULY TO 18 JULY
 NMBR LAT LO
 NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 15 JULY, 1994

 BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
 NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 15 JULY, 1994

 BEGIN MAX END LOCATION TYPE SIZE DUR II IV
 15/ 1625 1636 1709 LDE B3.3 44

INFERRED CORONAL HOLES. LOCATIONS VALID AT 15/2400Z

 ISOLATED HOLES AND POLAR EXTENSIONS
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
 92 N06W19 S06W19 N08W51 N27W25 093 ISO POS 016 10830A
 93 N67E51 N36W10 N46W17 N67E51 050 EXT POS 011 10830A
 94 S33E66 S33E66 S30E36 S27E42 009 ISO NEG 003 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

 Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

 14 Jul: 0428 0431 0433 B1.0
 0844 0853 0859 C1.9 SF 7746 N10W78
 1036 1042 1047 B2.1
 1442 1449 1456 B1.6
 1902 1903 1911 SF 7746 N12W84
 1955 1959 2002 C2.3 SF S14E77
 2351 2355 2359 B7.5 SF S14E73

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

 C M X S 1 2 3 4 Total (%)
 -- -- -- -- -- -- -- -- --
 Region 7746: 1 0 0 2 0 0 0 0 002 (28.6)
 Uncorrelated: 1 0 0 2 0 0 0 0 005 (71.4)

Total Events: 007 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
14 Jul: 1955	1959	2002	C2.3	SF			S14E77	III,V

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Sun, 17 Jul 1994 23:51:44 MDT
From: ihnp4.ucsd.edu!swrindt!howland.reston.ans.net!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 17 July
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

17 JULY, 1994

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 18 jul-20 jul

A. Middle Latitudes

Active 10/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes

Active 10/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

HF propagation conditions were below-normal on transpolar and transauroral paths. Polar and high latitude substorming resulted in periods of moderate multipathing and associated fading. However, conditions have begun improving and are expected to continue improving to near-normal values on about 19 July.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 17/2400Z JULY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7751	S12W41	074	0010	AXX	01	001	ALPHA	
7753	S12W16	049	0000	AXX	00	001	ALPHA	
7754	N12W47	080	0010	BX0	04	005	BETA	
7756	S12E33	000	0040	BX0	06	012	BETA	
7757	N13E62	331	0160	DAO	07	004	BETA	
7755	N07W81	114					PLAGE	

REGIONS DUE TO RETURN 18 JULY TO 20 JULY

NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 17 JULY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
0425	0425	0425						210	

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 17 JULY, 1994

 BEGIN MAX END LOCATION TYPE SIZE DUR II IV
 NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 17/2400Z

 ISOLATED HOLES AND POLAR EXTENSIONS
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
 NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

 Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

 16 Jul: 0012 0023 0026 B8.1
 0114 0117 0119 B5.4
 0126 0152 0206 B8.3
 0251 0304 0313 C1.4
 0546 0551 0555 B6.1
 0737 0740 0743 B4.0
 0749 0758 0805 B4.2
 0843 0850 0902 B6.9 SF 7756 S16E53
 0916 0920 0922 B5.5
 1143 1148 1206 B1.6
 1235 1256 1304 B2.0
 1342 1346 1350 B3.0 SF N11E81
 1629 1630 1632 SF 7757 N12E73
 1950 2011 2020 B3.7
 2250 2257 2304 B2.6
 2324 2327 2330 B1.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

 C M X S 1 2 3 4 Total (%)
 -- -- -- -- -- -- -- --
 Region 7756: 0 0 0 1 0 0 0 0 001 (6.2)
 Region 7757: 0 0 0 1 0 0 0 0 001 (6.2)
 Uncorrelated: 1 0 0 1 0 0 0 0 014 (87.5)

Total Events: 016 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
-----	----	----	----	-----	--	-----	-----	-----
NO EVENTS OBSERVED.								

NOTES:

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** End of Daily Report **

End of Info-Hams Digest V94 #815
